

DERWENT-ACC-NO: 2000-145737

DERWENT-WEEK: 200013

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TITLE: Force control belt backstand for robot-operated abrasive finishing and polishing of e.g. turbine blades, orthopedic implants, and grinding welds

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PRIORITY-DATA: 1999RD-0427023 (October 20, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>RD 427023 A</u>	November 10, 1999	N/A	004	B24B 000/00

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
RD 427023A	N/A	1999RD-0427023	October 20, 1999

INT-CL (IPC): B24B000/00

ABSTRACTED-PUB-NO: RD 427023A

BASIC-ABSTRACT:

NOVELTY - The size and location of the main grinder components are optimized through a computer model. The computer model analyzes the theoretical and actual grinding forces, grinding friction, and belt tension effects to provide optimal size and location for the pivot arm as well as the contact and idler wheels.

USE - For robot-operated abrasive finishing and polishing of e.g. turbine blades.

ADVANTAGE - Grinding force linearity in the optimized design is increased dramatically through the pivot range. This allows delicate finishing and grinding operations to be performed with greater accuracy.

DESCRIPTION OF DRAWING(S) - The drawing shows the belt backstand design.

CHOSEN-DRAWING: Dwg.6/6

TITLE-TERMS: FORCE CONTROL BELT ROBOT OPERATE ABRASION FINISH POLISH TURBINE
BLADE IMPLANT GRIND WELD

DERWENT-CLASS: P61

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2000-107924

